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## CLAIMS

1.-12. (Canceled)

13. (Previously Presented) An implantable medical device comprising:  
a sensor for gathering physiological data related to sleep respiratory events;  
a memory unit for storing the physiological data;  
a processor for extracting a sleep disordered breathing indicator data set including an average cycle length and a frequency of at least one of Cheyne-Stokes respiration and periodic breathing from the physiological data, and storing the data set in the memory unit; and  
a telemetry device for transmitting the data set.
14. (Previously Presented) The medical device of claim 13, wherein the processor extracts arousals from the physiological data and stores the wake events in memory.
15. (Previously Presented) The medical device of claim 13, wherein the telemetry device permits interrogation of the memory.
16. (Previously Presented) The medical device of claim 13, wherein the is an intracardiac impedance sensor.
17. (Previously Presented) The medical device of claim 13, wherein the sensor is an intrathoracic impedance sensor.
18. (Previously Presented) The medical device of claim 13, wherein the sensor is a body movement sensor.

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19. (Previously Presented) The medical device of claim 13, wherein the is an oxygen sensor.
20. (Previously Presented) The medical device of claim 13, wherein the sensor is a pressure sensor.
21. (Previously Presented) The medical device of claim 13, wherein the memory unit is interrogated at predetermined intervals.
22. (Previously Presented) An implantable medical device comprising:
  - a plurality of sensors for gathering physiological data related to sleep respiratory events;
  - a processor for extracting an average cycle length and a frequency of at least one Cheyne-Stokes respiration and periodic breathing from the physiological data, and storing the data in a memory unit; and
  - a telemetry device for externally transmitting sleep respiratory events from a processor in the medical device.
23. (Previously Presented) The medical device of claim 22, wherein the processor extracts arousals from the data corresponding to the sleep respiratory events.
24. (Previously Presented) The medical device of claim 22, wherein the sensor is an intracardiac impedance sensor.
25. (Previously Presented) The medical device of claim 22, wherein the sensor is an intrathoracic impedance sensor.
26. (Previously Presented) The medical device of claim 22, wherein the sensor is a body movement sensor.

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27. (Previously Presented) The medical device of claim 22, wherein the sensor is an oxygen sensor.
28. (Previously Presented) The medical device of claim 22, wherein the sensor is a pressure sensor.
29. -- 36. (Cancelled)